

REMARKS

This communication responds to the non-final Office Action mailed on July 31, 2008. Claims 1, 7, 11, 14-15, 19, 22, and 27 are amended, claims 2 and 4 are canceled, and no claims are added in this communication. As a result, claims 1-3, 7-9, 11, 13-15, 18-19, 22, and 27 are now pending in this Application. It is respectfully noted that claim 14 was amended to recite a different element of the claimed system, and not for reasons related to patentability.

Claim Objections

Claim 27 was objected to due to informalities. The Applicant appreciates the Examiner's thorough review of the claims in this regard, and has amended claim 27 to remove the repetitive language caused by a typographical error. Reconsideration and withdrawal of the objection is respectfully requested.

§101 Rejection of the Claims

Claims 22 and 27 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. The Applicant has amended the preamble in each of these claims to recite:

“An article comprising a machine-accessible medium having instructions stored therein, wherein the instructions, when executed, result in a machine performing:”

It is believed that this amendment fully addresses the concerns expressed by the Office with respect to statutory subject matter. Thus, reconsideration and withdrawal of the rejection are respectfully requested.

§102 Rejection of the Claims

Claims 15, 18 and 27 were rejected under 35 U.S.C. § 102(a) as being anticipated by Rogerson (U.S. 2003/0099299 A1). The Applicant does not admit that Rogerson is prior art and reserves the right to swear behind this reference at a later date. In addition, because the Office

has not properly established a *prima facie* case of anticipation with respect to the amended claims, the Applicant respectfully traverses this rejection of the claims.

Anticipation under 35 USC § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration. *See Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). The Applicant submits that Rogerson does not teach or suggest “translating a first bit stream into a multi-tone communications signal having a substantially simultaneous multi-tone signaling bandwidth of greater than about 20 percent of an associated carrier frequency using a master oscillator and multiple slave oscillators”. While the Office asserts that figure 27, blocks 360 and 340, and figure 19, paragraph [0147] of Rogerson disclose “a master oscillator and at least one slave oscillator”, a close reading of the reference reveals that this assertion is incorrect.

Actually, these cited portions of Rogerson do not mention the existence of a master oscillator and slave oscillators. Instead, block 360 comprises control logic “which may include a trigger generator ... [and] outputs a frequency control signal S310”. *See* Rogerson, para. [0147]. The oscillator 340 is tunable to emit waveforms over different frequency bands at different times according to frequency control signal S310. *Id.* In other words, block 360 includes logic to start the oscillator 340, gate the oscillator signal, and control its frequency. *Id.* However, block 360 is not a master oscillator or a slave oscillator, as asserted by the Office.

While claims during examination should be interpreted as broadly as their terms reasonably allow, that interpretation must be tempered by the context in which the terms are used. The *Hyatt* court states that “during examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 U.S.P.Q.2D (BNA) 1664, 1667 (Fed. Cir. 2000) (emphasis added) (“During examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification.”; citing *In re Graves*, 69 F.3d 1147, 1152, 36 U.S.P.Q.2D (BNA) 1697, 1701 (Fed. Cir. 1995); *In re Etter*, 756 F.2d 852, 858, 225 U.S.P.Q. (BNA) 1, 5 (Fed. Cir. 1985) (en banc)).

The interpretation of the terms “master oscillator” and “slave oscillator” proffered by the Office is neither reasonable, nor consistent with the specification. It is not reasonable because one of ordinary skill in the art would understand that a master oscillator and slave oscillator both

serve as oscillators. It is not consistent with the specification because control logic coupled to an oscillator does not provide the type of operation where “the slaves VCO2, VCO3, ..., VCON may follow the master VCO1 in a fairly predictable fashion, keeping substantially fixed ratios from their frequencies to the master VCO”. Application, para. [0016]. For at least this reason, the Applicant respectfully submits that Rogerson does not anticipate claim 15 and its dependent claim 18.

The above conclusion with respect to independent claim 15 also applies to independent claim 27. Thus, reconsideration and withdrawal of the rejection of claims 15, 18 and 27 under § 102(a) are respectfully requested.

§103 Rejection of the Claims

Claims 1-4, 19 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogerson in view of Walker (U.S. 2004/0048574 A1). Claims 7-11, 13 and 14 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogerson in view of Walker and further in view of O'Neill (U.S. 5,559,866 A). The Applicant does not admit that Walker and O'Neill are prior art and reserves the right to swear behind these references at a later date. In addition, the Applicant respectfully traverses the rejection of these claims under 35 U.S.C. § 103(a) for the reasons stated below.

Amended claims 1 and 11 recite “a multi-bit encoder coupled to a multi-tone generator comprising a master oscillator and multiple slave oscillators to provide a multi-tone communications signal having a substantially simultaneous multi-tone signaling bandwidth of greater than about 20 percent of an associated carrier frequency”. For the reasons given above, Rogerson does not teach or suggest this feature. Neither do Walker or O'Neill. Claims 2-3 and 13-14 comprise additional, patentable subject matter. Therefore, claims 1-3, 11, and 13-14 should be in condition for allowance.

Amended claim 7 recites “an amplifier having an averaging automatic gain control to receive the multi-tone communications signal from the distribution module and to apply a substantially equal gain to the plurality of tones”. Similarly, amended claims 19 and 22 recite “amplifying the multi-tone communications signal using an approximately equal gain provided by an amplifier having an averaging automatic gain control”. While the Office asserts this

feature is provided via Rogerson's figure 48, block 550, and figures 44-58, a close reading of this reference reveals that the assertion is incorrect. Neither the LNA 550 nor the burst detectors 432 of Rogerson operate as an averaging automatic gain control. The amplifiers taught by Rogerson merely amplify the signals presented to them, and do nothing with respect to controlling gain automatically, let alone implementing an averaging function. Thus, the Applicant respectfully submits that the rejection of amended independent claims 7, 19, and 22 is improper. This argument also applies to dependent claims 8-9, which contain additional, patentable subject matter. Therefore claims 7-9, 19, and 22 should be in condition for allowance.

Reconsideration and withdrawal of the rejections of claims 1-4, 7-11, 13-14, 19, and 22 under 35 U.S.C. § 103(a) as being unpatentable is thus respectfully requested.

CONCLUSION

The Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (210) 308-5677 to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(210) 308-5677

By

/ Mark V. Muller /

Mark V. Muller
Reg. No. 37,509